i Li

- 1. A computer-implemented method for aggregating and expressing geographically-linked data provided by a plurality of observers, comprising the steps of:
 - a) providing an interactive map capable of receiving 4
 - location and associated data over the Internet from said 5
 - plurality of observers; 6
 - 7 b) receiving a first location and first associated data
 - 8 from a first observer:
 - 9 c) storing said lodation and said first associated data
 - 10 in a database as data records;
- 11 12 12 13 14 d) receiving a second location and second associated
 - data from a second observer;
 - e) repeating steps c) and d) with said second location
 - and second associated data;
 - f) receiving a spatial query from a user specifying at 15
 - least one location on said interactive map; and 16
 - g) providing the data records associated with the user-17
 - 18 specified at least one location;
 - 19 whereby data records received from the plurality of
 - observers may be \$tored according to geographical location 20
 - 21 and retrieved for study according to a geographical-based
 - 22 query.
 - The method bf claim 1 further comprising the step of 1
 - 2 translating sald first location to one or more map coordinate
 - points; and wherein said step of storing said first location

- 4 further comprises storing said map coordinate points in said
- 5 database.
- 1 3. The method of claim 1 further comprising the step of
- 2 translating said first location to a line; and wherein said
- 3 step of storing said first location farther comprises storing
- 4 said line in said database.
- 1 4. The method of claim 1 further comprising the step of
- 2 translating said first location to a polygon; and wherein
- 3 said step of storing said first /location further comprises
- 4 storing said polygon in said database.
- 1 5. The method of claim 1 wherein said second location
- 2 overlaps said first location.
- 1 6. The method of claim 1/further comprising the steps of:
- i) receiving a user-specified link factor;
- j) selecting data/records from said database using said
- 4 first link factor;
- 5 k) creating a map overlay by linking said selected
- 6 records; and
- 7 l) overlaying said map overlay on said interactive map.
- 1 7. The method of claim 1 further comprising the steps of
- 2 providing a plurality of references to each of said locations

- 3 in said interactive map, any one of said plurality of
- 4 references to be used as a location point specifier.
- 1 8. The method of claim 7 wherein the step of providing a
- 2 plurality of references further comprises displaying a list
- 3 of available references for a user-specified location on the
- 4 interactive map.
- 1 9. The method of claim 1 wherein said interactive map has a
- 2 plurality of layers and said at least one location is
- 3 specified according to layer.
- 1 10. The method of claim 7 wherein said plurality of
- 2 references includes longitude and latitude.
- 1 11. The method of claim 7 wherein said plurality of
- 2 references includes a place name.
- 1 12. The method of claim 7 wherein said plurality of
- 2 references includes an observer-specified name.
- 1 13. The method of claim 7 wherein said plurality of
- 2 references includes geographical association reference.
- 1 14. The method of claim 6 wherein said link factor is a
- 2 selected entry type in said data records.

- 1 15. The method of claim 6 wherein said link factor is a
- 2 project name included in said data records.
- 1 16. The method of claim 6 further comprising the steps of:
- 2 m) receiving at least one additional user-specified link
- 3 factor;
- n) selecting additional data records from said database
- 5 using said at least one additional link factor;
- o) creating a second map overlay by linking said
- 7 additional data records; and
- 8 p) overlaying said second map/overlay on said
- 9 interactive map.
- 1 17. A computer-implemented method for accumulating
- 2 geographically-linked data in order to respond to
- 3 geographical based queries, comprising the steps of:
- 4 a) providing an interactive map;
- b) receiving a plurality of locations and a plurality of
- 6 associated data;
- 7 c) translating said plurality of locations to one or
- 8 more map coordinate points;
- 9 d) storing said one or more map coordinate points and
- 10 said plurality/of associated data in a database as data
- 11 records;
- g) receiving at least one geographical based query from
- 13 at least one user, said at least one user specifying at least
- one location point on said interactive map; and

10

- 15 h) providing the data records associated with the user-
- 16 specified at least one location.
- 1 18. A computer-implemented method for conducting or nithology
- 2 studies, comprising the steps of:
- a) providing a web-based interactive map capable of
- 4 receiving as input locations and associated data from a
- 5 plurality of servers;
- 6 b) creating a plurality of bird observation sites in
- 7 response to input from said plurality of observers;
- 8 c) accepting locations and associated data from said
- 9 plurality of observers;
 - d) translating said locations to map coordinate points;
- e) relating said associated data to bird observation
- 12 sites using said map coordinate points; and,
- 13 f) storing said associated data in a database at
- 14 respective related bird observation sites.
- 1 19. The method of claim $\frac{1}{8}$ further comprising the steps of:
- g) accepting a spatial query from a user, said spatial
- 3 query including at least one bird observation site;
- 4 h) accessing said database for data records associated
- 5 with said at least one bird observation site; and
- 6 i) creating a report from data records found in step h).
- 1 20. The method of claim 19 wherein said spatial query
- 2 further comprises a bird species.

- 1 21. A computer-implemented method for collecting data from
- 2 at least one of a plurality of points of interest, the
- 3 location of the one point being initially undetermined, the
- 4 collected data being indicative of an event occurring at the
- 5 one point of interest, said method comprising the steps of:
- 6 a) providing at least one geographically referenced map
- 7 for receiving a mark indicative of the relative position of
- 8 the one point of interest, the one map including at least one
- 9 reference points whose geographic coordinates are known;
- b) processing the relative position pf the one point of
- 11 interest with respect to the one reference point to provide
- 12 geographic coordinates of the one point of interest; and
- c) associating the geographic coordinates with the data
- 14 related to the one point of interest
 - 1 22. A computer-implemented method for facilitating the
- 2 collection and inputting of data to a centrally disposed
- 3 database by a plurality of data gatherers by use of a network
- 4 which is accessible from points within a geographic area, the
- 5 data being indicative of an event occurring at one of a
- 6 plurality of points of interest within the geographic area,
- 7 the location of the plutality of points of interest being
- 8 initially undetermined, said method comprising the steps of:
- a) downloading/over the network upon request of at least
- one of the plurality of data gatherers at least one
- 11 geographically referenced map to the one data gatherer, the

- 12 one geographically referenced map including at least on
- 13 reference point whose geographic coordinates are known and is
- 14 adapted to receive a mark inputted by the data gather and
- 15 indicative of the relative position of the one point of
- 16 interest;
- b) receiving at the centrally disposed data base the
- 18 mark and the data related to the mark; and
- c) processing the relative position of the one point of
- 20 interest with respect to the one reference/point to provide
- 21 the geographic coordinates of the one point of interest.
 - 1 23. The computer-implemented method of claim 22, wherein the
- 2 database includes a plurality of storage locations that are
- 3 respectively addressable by the coordinates of corresponding
- 4 points of interest, and there is/a further included the step
- 5 of inputting the data related to the one point of interest to
- 6 the storage location addressed by the coordinates of the data
- 7 related to the corresponding point of interest.
- 1 24. The method of constructing and inputting data into a
- 2 database, which is connected to a network and is accessible
- 3 from a plurality of points within a geographic area, the
- 4 location of the plurality of points of interest being
- 5 initially undetermined, the data being indicative of an event
- 6 occurring at one of a plurality of points of interest within
- 7 the geographic/area, said method comprising the steps of:

8	a) constructing the database to have a plurality of
9	storage locations, each of said storage locations being
10	dedicated to receive data from a corresponding one point of
11	interest and addressable in accordance with the geographic
12	coordinates of the corresponding one point of interest;
13	b) providing at least one geographically referenced map
14	for receiving a mark indicative of the relative position of
15	the one point of interest, the one map including at least one
16	reference point whose geographic coordinates are known;
17	c) processing the relative position of the one point of
18	interest with respect to the one reference point to provide
19	geographic coordinates of the one point of interest;
20	d) addressing one of the storage locations according to
21	the geographic coordinates of the one point of interest; and
22	e) inputting data relative to the one point of interest
23	into the addressed storage location.